

EAST - [Untitled1]
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- (1159) rubber and silica and thiuram
- (617) (rubber and silica and thiuram) and guanidine
- (1209) "thiuram disulfide"
- (150) ((rubber and silica and thiuram) and guanidine) and "thiuram disulfide"

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09/590320

als ☐ Synonyms

light all hit terms initially

((rubber and silica and thiuram) and

	U	I	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	R
142	<input type="checkbox"/>	<input type="checkbox"/>	US 3862078 A	19750121	41	PROCESS FOR CONVERTING COARSE AQUEOUS POLYMER	523/335	522/86 ; 523/343	
143	<input type="checkbox"/>	<input type="checkbox"/>	US 3857775 A	19741231	11	ELECTROLYTIC CELL INCLUDING A FLEXIBLE SHEET COVERING	204/252	204/242 ; 204/266	
144	<input type="checkbox"/>	<input type="checkbox"/>	US 3816323 A	19740611	6	PROCESS FOR THE VULCANIZATION OF NATURAL OR	502/167	525/332.7 ; 525/348	
145	<input type="checkbox"/>	<input type="checkbox"/>	US 3768537 A	19731030	10	TIRE	152/209.5	524/571 ; 524/575.5	
146	<input type="checkbox"/>	<input type="checkbox"/>	US 3719572 A	19730306	22	AQUEOUS LATICES OF HIGH POLYMER COMPOSITIONS AND	522/85	260/DIG.22 ; 366/147	
147	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 3673133 A	19720627	11	SYNTHETIC LATEX FOAM RUBBER AND METHOD OF MAKING SAME	521/66	260/DIG.22 ; 521/139	
148	<input checked="" type="checkbox"/>	<input type="checkbox"/>	US 3658637 A	19720425	6	DIALKYL OXALATE STABILIZATION OF POLYESTER	442/293	156/297 ; 428/480	
149	<input type="checkbox"/>	<input type="checkbox"/>	US 3644263 A	19720222	30	HIGH POLYMER LATICES AND	523/326	523/328	

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FILE COVERS 1907 - 10 Oct 2002 VOL 137 ISS 15
FILE LAST UPDATED: 9 Oct 2002 20021009/BD)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLLES at an arrow prompt or use the CAS Roles thesaurus URL field in this file.

```
=> s tetrabenzyl thiuram disulfide
      141 TETRABENZYL
      2 TETRABENZYLES
      144 TETRABENZYL
      (TETRABENZYL OF TETRABENZYLES)
      2115 THIURAM
      126 THIURAMS
      3311 THIURAM
      (THIURAM OR THIURAMS)
      37983 DISULFIDE
      12412 DISULFIDES
      92569 DISULFIDE
      (DISULFIDE OR DISULFIDES)
LI      7 TETRABENZYL THIURAM DISULFIDE
      (TETRABENZYL(W THIURAM(W DISULFIDE))
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=> d 11 1-7 t1

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LI ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI Agent and method for removing harmful substances from combustion gases

LI ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI Rubber compositions and method for increasing the Mooney scorch value

LI ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI Balanced crosslink network created in natural rubber by using sulfenamide/  
tetrabenzyl thiuram disulfide cure system

LI ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI Balanced network with sulfenamide/tetrabenzyl thiuram  
disulfide (TBzTD)

LI ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI Recycling of hardened polysulfide and/or polymercaptan adhesives and
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sealants and products therefrom

LI ANSWER 6 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI Rubber compositions with vibration-damping and low heat-buildup ability

LI ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS
TI A new safe thiuram, **tetrabenzyl thiuram disulfide**

END 11 1-7 all

LI ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS
AN 2012:626063 CAPLUS
IN 137:173921
TI Agent and method for removing harmful substances from combustion gases
IN Ikeda, Futoshi; Yasutake, Shigeo; Ikeda, Hiroaki; Sato, Katsuaki
PA Ebara Corp., Japan
SC Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKKYAF

IT Patent
LA Japanese
IC ICM 5612:13-79
ICB 5612:13-34; B01J020-22
CC 56-4 Air Pollution and Industrial Hygiene
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI	JP 2002238734	A2	20000820	JP 2001-210756	20010711
PRAI	JP 2000-371598	A	20001207		
OS	MAEPAT 137:173921				

AB The agent for removing harmful substances from waste gases emitted out of combustion furnaces contains a dioxin treatment agent and a slaked lime powder. The dioxin treatment agent may be nitrobenzene derivs.; trimercaptotriazine alkali metal or alk. earth metal salts, ammonium salts, or amine salts; dithiocarbamic acid derivs. and their alkali metal or alk. earth metal salts, ammonium salts, amine salts, Zn or Ni salt; thiuram disulfide derivs.; peroxodisulfuric acid salts; and dithiocarbazinic acid hydrazine salt derivs. Harmful substance removal is carried out by adding the agent to waste gases emitted out of combustion furnaces to cause reaction between the agent and the harmful substances. The app. for the removal comprises a gas cooling app. for cooling the waste gases to a prescribed temp., an agent supply app. for supplying the agent to the cooled waste gases, a dust collecting app. for collecting dust from the resulting waste gases. Without requiring any spraying app. and adsorbing app., harmful substances, e.g. HCl, heavy metals, and dioxins can be removed.

ST combustion waste gas harmful substance detoxification; nitrobenzene trimercaptotriazine dithiocarbamate combustion gas treatment; thiuram disulfide peroxodisulfate combustion gas treatment; dithiocarbazinic acid hydrazine combustion gas treatment; dioxin hydrochloric acid heavy metal removal

IT Ashes (residues)
fly, detoxification of; harmful substance removal agent, method, and app. for waste gas detoxification

IT Combustion gases
detoxification
Waste gases
harmful substance removal agent, method, and app. for waste gas detoxification

IT Heavy metals
RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC

Process
 (harmful substance removal agent, method, and app. for waste gas detoxification)

IT Hazardous materials
 (removal of; harmful substance removal agent, method, and app. for waste gas detoxification)

IT 92-93-3, p-Nitrothiophenyl 94-27-1, Dipentamethylene thiuram disulfide
 98-77-1 98-95-3D, Nitrobenzene, derivs. 99-99-1, p-Nitrotoluene
 100-17-4, p-Methoxynitrobenzene 100-23-2, p-Dimethylaminonitrobenzene
 128-64-1, Dimethyldithiocarbamic acid sodium salt 137-26-8, Tetramethyl
 thiuram disulfide 471-32-9D, Hydrazinecarbodithioic acid, derivs.
 504-90-5N, Thiuram disulfide, derivs. 594-17-0D, Dithiocarbamic acid,
 derivs. 598-64-1, Dimethyldithiocarbamic acid dimethylamine salt
 638-16-4D, Trimercaptotriazine, derivs. 7727-54-0 7775-27-1, Sodium
 peroxodisulfate 10591-85-2, **Tetrabenzyl thiuram
 disulfide** 13448-49-3D, Peroxodisulfuric acid, salts
 16528-78-2, Dicyclohexyldithiocarbamic acid sodium salt 17766-26-6
 1742-17-1, 2,3,7,8-Tetrachlorodibenzo-p-dioxin 211-4-51-6, Nitrophenol
 4141-28-8 4170-13-1 5183-16-6 13183-17-2 55110-46-8
 42851-51-2, Tetrabenzyl thiuram disulfide 74411-24-7 83412-13-1
 88192-43-2 131891-99-1 448927-18-2 448927-19-3 448927-20-6
 448927-21-7 448927-22-8 448927-23-9 448927-24-0 448927-25-1
 448927-26-2 448927-27-3 448927-30-8 448927-32-0 448927-34-2
 448927-36-4 448927-37-5 448927-39-7 448927-41-1
 RL: TEM (Technical or engineered material use); USES (Uses)
 (agent contg.; harmful substance removal agent, method, and app. for
 waste gas detoxification)

IT 132-64-8, Dibenzofuran 262-12-4, Dibenzo-p-dioxin
 RL: PDL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC
 Process
 (chloro deriva.; harmful substance removal agent, method, and app. for
 waste gas detoxification)

IT 1746-01-6, 2,3,7,8-Tetrachlorodibenzo-p-dioxin 7489-97-6, Mercury,
 processes 7647-01-0, Hydrochloric acid, processes
 RL: PDL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC
 Process
 (harmful substance removal agent, method, and app. for waste gas
 detoxification)

DI ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS

AN 2001:904 46 CAPLUS

IN 136:3871

TI Rubber compositions and method for increasing the Mooney scorch value

IN Hannon, Martin J.; Hong, Sung Wnee; Cornell, Robert J.

PA Uniroyal Chemical Company, Inc., USA

SC PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C08K005-40

ICS C08K003-36; C08L021-00

CC 39-9 (Synthetic Elastomers and Natural Rubber)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001094461	A1	20011213	WO 2001-US16155	20010517
	WI: BR, CA, CN, DE, ID, IN, JP, KR, MX, SE BW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				

FEAL US 2001094461 A 20010944

AB A rubber compn. is disclosed wherein the rubber compn. contains at least
 (a) a rubber component; (b) a silica filler; and, (c) at least one thiuram

disulfide accelerator, it being provided that di-Ph guanidine is substantially absent in the rubber compn. The compns. may also include suitable amts. of other ingredients such as carbon black, coupling agents, antiozonants, antioxidants, etc. Thus, a rubber compn. composed of SBR rubber 75, butadiene rubber 25, carbon black 32, silica 44, Si69 3.52, arom. oil 31.50, stearic acid 1, p-phenylenediamine 2, hydrocarbon wax 1.10, zinc oxide 2.30, N-tert-butyl-2-benzothiazole sulfenamide 1.50, sulfur 2, and tetrasilyl (C12-14) thiuram disulfide Royalac 150 1.03 parts showed a Mooney Scorch (at 135.degree.) of 12 min, compared with 10 min for a compn. contg. 1 part of di-Ph guanidine instead of 1.13 part of Royalac 150.

- ST rubber compn silica thiuram disulfide accelerator; Mooney scorch rubber silica thiuram disulfide
- IT Carbon black, uses
 RL: MDA (Modifier or additive use); USES (Uses)
 (N234; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Synthetic rubber, uses
 RL: PDF (Polymer in formulation); USES (Uses)
 (butadiene-isoprene-styrene; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT synthetic rubber, uses
 RL: PDF (Polymer in formulation); USES (Uses)
 (butadiene-isoprene; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Coupling agents
 Vulcanization accelerators and agents
 (rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Isoprene rubber, uses
 Isoprene-styrene rubber
 Natural rubber, uses
 Neoprene rubber, uses
 Nitrile rubber, uses
 RL: PDF (Polymer in formulation); USES (Uses)
 (rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT Butadiene rubber, properties
 Styrene-butadiene rubber, properties
 RL: PDF (Polymer in formulation); PRP (Properties); USES (Uses)
 (rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT 10591-86-1, **Tetrabenzyl thiuram disulfide**
 RL: MDA (Modifier or additive use); USES (Uses)
 (Benzyl Tlex; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT 10591-86-1
 RL: PDF (Polymer in formulation); PRP (Properties); USES (Uses)
 (butadiene rubber; rubber compn. contg. silica and thiuram disulfide accelerator with increased Mooney scorch value)
- IT 16-94-6, Vinyltrichlorosilane 73-68-0, Vinyltriethoxysilane 919-30-2, .gamma.-Aminopropyltriethoxysilane 1067-83-4, Vinyltris(.beta.-methoxyethoxy)silane 1119-82-6 1760-24-3, N-.beta.-(Aminobenzyl)-.gamma.-aminopropyltrimethoxysilane 2530-83-8, .gamma.-Glycidioxypropyltrimethoxysilane 2530-85-0, .gamma.-Methacryloxypropyltrimethoxysilane 2530-87-2, .gamma.-Chloropropyltrimethoxysilane 2602-34-3, .gamma.-Glycidioxypropyltriethoxysilane 2768-02-7, Vinyltrimethoxysilane 2897-60-1, .gamma.-Glycidioxypropylmethyldiethoxysilane 3068-76-6, N-Phenyl-.gamma.-aminopropyltrimethoxysilane 3069-29-2, N-.beta.-(Aminoethyl)-.gamma.-aminopropylmethyldimethoxysilane 3389-04-3, .beta.-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane 4420-74-0,

.gamma.-Mercaptopropyltrimethoxysilane 5089-72-5 13822-56-5,
 .gamma.-Aminopropyltrimethoxysilane 14513-34-9, .gamma.-
 Methacryloxypropylmethyldimethoxysilane 21142-29-0, .gamma.-
 Methacryloxypropyltriethoxysilane 40372-72-3, Si63 65100-04-1,
 .gamma.-Methacryloxypropylmethyldiethoxysilane 113946-60-4 113946-66-0
 119388-84-4 119388-88-8

RI: MOA (Modifier or additive use); USES (Uses)
 (coupling agents; rubber compn. contg. silica and thiuram disulfide
 accelerator with increased Mooney scorch value)

IT 7631-16-8, Zeosil 1165, uses

RL: MOA (Modifier or additive use); USES (Uses)
 (fillers; rubber compn. contg. silica and thiuram disulfide accelerator
 with increased Mooney scorch value)

IT 9003-31-0

EL: PDF (Polymer in formulation); USES (Uses)
 (isoprene rubber, rubber compn. contg. silica and thiuram disulfide
 accelerator with increased Mooney scorch value)

IT 9003-31-0

EL: PDF (Polymer in formulation); USES (Uses)
 (isoprene-styrene rubber, rubber compn. contg. silica and thiuram
 disulfide accelerator with increased Mooney scorch value)

IT 9010-98-1

RL: PDF (Polymer in formulation); USES (Uses)
 (neoprene rubber, rubber compn. contg. silica and thiuram disulfide
 accelerator with increased Mooney scorch value)

IT 9003-13-3

EL: PDF (Polymer in formulation); USES (Uses)
 (nitrile rubber, rubber compn. contg. silica and thiuram disulfide
 accelerator with increased Mooney scorch value)

IT 95-31-8, Delta NS 7794-34-8, Sulfur, Uses 380373-67-6, Royalac 150

RL: MOA (Modifier or additive use); USES (Uses)
 (rubber compn. contg. silica and thiuram disulfide accelerator with
 increased Mooney scorch value)

IT 25102-51-7, Butadiene-isoprene copolymer 26602-62-0,
 Butadiene-isoprene-styrene copolymer

EL: PDF (Polymer in formulation); USES (Uses)
 (rubber; rubber compn. contg. silica and thiuram disulfide accelerator
 with increased Mooney scorch value)

IT 9003-31-0

EL: PDF (Polymer in formulation); PDF (Properties); USES (Uses)
 (styrene-butadiene rubber, rubber compn. contg. silica and thiuram
 disulfide accelerator with increased Mooney scorch value)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bridgestone Corp; EP 0479526 A 1992 CAPLUS
 (2) Continental Ag; EP 0857751 A 1998 CAPLUS
 (3) Usamoto, T; US 376819 A 1972 CAPLUS

LI ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS

AN 2001:895206 CAPLUS

IN 136:185107

TI Balanced crosslink network created in natural rubber by using sulfenamide/
tetrabenzyl thiuram disulfide cure system

AU Datta, R.; Egbrink, B. Oude; Ingham, F.; Mori, T.

CS Neth.

SO Kautschuk Gummi Kunststoffe (2001), 54(11), 612, 614-617

CODEN: KKKKAC; I.S.N: 0022-8517

FE Huethig GmbH

LI Journal

LA English

CC 39-3 Synthetic Elastomers and Natural Rubber.

AB The possibility of an N-nitrosamine safe thiuram, **tetrabenzyl**

thiuram disulfide (TBzTD), is explored to obtain an improvement in cure efficiency together with a balanced network in typical natural rubber compds. A network study has been carried out in order to correlate cured properties to the fine structure of the vulcanizates.

ST natural rubber vulcanizing agent **tetrabenzyl thiuram disulfide** sulfenamide; structure natural rubber vulcanizate

IT Natural rubber; properties
 RL: CPS (Chemical process); PEF (Physical, engineering or chemical process); PIF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
 SMR-CV; balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system)

IT Compression
 Elongation, mechanical
 Fatigue, mechanical
 Hardness (mechanical)
 Mechanical loss
 Solubility
 Tensile strength
 Torque
 Viscoelasticity
 Vulcanization
 Vulcanization accelerators and agents
 balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system)

IT 1314-13-2, **Tetrabenzyl thiuram disulfide**
 RL: MDA (Modifier or additive use); USES (Uses)
 (Perkacit TBzTD; balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system)

IT 95-34-9, CBS 137-26-3, Perkacit TMTD 793-24-8, 6PPD 1314-13-2, Zinc oxide, uses
 RL: MDA (Modifier or additive use); USES (Uses)
 (balanced crosslink network created in natural rubber by using sulfenamide/**tetrabenzyl thiuram disulfide** cure system)

RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

1. Amikari, B; Rubber Chem Technol 1983, V50, P327 CAPLUS
2. Datta, R; J Polym Materials 1998, V15, P379 CAPLUS
3. Datta, R; Kautschuk Gummi Kunststoffe 1999, V52, P758 CAPLUS
4. Ellis, B; Rubber Chem Technol 1964, V37, P571
5. Ferrandino, M; 147th meeting of Rubber division 1995
6. Flory, P; J Chem Phys 1943, V11, P521 CAPLUS
7. Krywowski, T; Rubber Chem Technol 1977, V50, P671 CAPLUS
8. Linwasser, H; Kautschuk Gummi Kunststoffe 1989, V42, P22
9. Morris, M; Rubber Chem Technol 1995, V68, P794 CAPLUS
10. Mullins, L; J Appl Polym Sci 1959, V2, P1 CAPLUS
11. Russell, R; Rubber Chem Technol 1969, V42, P418
12. Saville, B; Rubber Chem Technol 1967, V40, P100 CAPLUS
13. Schotman, A; Rubber Chem Technol 1996, V69, P727 CAPLUS
14. Seeberger, D; Flexsys Technical Bulletin
15. Seeberger, D; Kautschuk Gummi Kunststoffe 1989, V42, P27 CAPLUS

11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS

AN 2001:506913 CAPLUS

IN 136:71089

TI Balanced network with sulfenamide/**tetrabenzyl thiuram disulfide** (TBzTD)

AU Datta, R.; Mciri, T.

Polysulfides

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT Adhesives

(two-component; recycling of hardened polysulfides and/or polymercaptans by depolymer. for)

IT 1440-47-8D, Chromium, salts, uses

RL: CAT (Catalyst use); NUU (other use, unclassified); USES (Uses)

(hexavalent; in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT 12-36-6D, Thiourea, derivs., uses 10-70-6 123-04-1, Sodium dimethyldithiocarbamate 136-13-2, Zinc dithyldithiocarbamate 137-26-8, Tetramethyl thiram disulfide 288-47-15, Thiapole, derivs. 1302-61-1, Lead dioxide 131-13-9, Manganese dioxide, uses 13591-85-2,

Tetrabenzyl thiuram disulfide 14726-16-4,

Zinc dithyldithiocarbamate

RL: CAT (Catalyst use); NUU (other use, unclassified); USES (Uses)

(in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT 81-68-7, Benzyl butyl phthalate

RL: MOA (Modifier or additive use); USES (Uses)

(in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT 160477-48-1, Terostat 298E

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(recycling of hardened polysulfides and/or polymercaptans by depolymer.)

LI ANSWER 6 OF 7 CASLUS COPYRIGHT 2012 ACS

AN 1996:1127.4 CASLUS

DN 124:134673

TI Rubber compositions with vibration-damping and low heat-buildup ability

IN Ariga, Noriomi; Kokuyashi, Yukio; Taichi, Shigemitsu; Oohara, Masaki; Yamamoto, Yoshiaki

PA Ouchi Shinko Kaseki Kogyo Kk, Japan

SC Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JESNAP

DT Patent

LA Japanese

IC 12M 20612.1-13

12S 20612.1-13; 20612.1-14; 20612.1-15

CC 22-10 (Synthetic Elastomers and Natural Rubber)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06121673	A2	19960103	JP 1994-184108	19940704

OS MARPAT 124:134673

AB Title compns. contain thiurams (EIR2NCS)2Sx [R1, R2 = Ph, benzyl, C1-18 linear, branched, or cyclic alkyl, C5-8 alicyclic group residues or heterocyclic (other than N) residues; x = 1-6] C1-5.0, dialkyltin oxides R3R4SnO2n [R3, R4 = C1-8 alkyl, n .gtoreq.1 integers] C1-5.0, and/or Zn dithiocarbamates 0.1-5.0 phr. A natural rubber compn. contg. S 2, tetrastearylthiuram disulfide 1.28, and polymeric dioctyltin oxide 0.98 phr was vulcanized at 150.degree. for 10 min to form a product with a 13.degree. tan.delta. of 0.0610 and ratio of dynamic modulus at 100 Hz and 1 Hz of 1.040.

ST thiuram sulfide vulcanizer; dialkyltin oxide vulcanizer; zinc dithiocarbamate vulcanizer; heat buildup redn vulcanizer; vibration damper rubber vulcanizer

IT Sulfides, uses

RL: CAT (Catalyst use); USES (Uses)

(mono- or poly-; rubber compns. with vibration-damping and low heat-buildup ability)

IT Rubber, butadiene-styrene, properties
 Rubber, natural, properties
 RL: PRP Properties
 thiuram sulfide- and/or zinc dithiocarbamate- and/or polymeric dialkyltin oxide-contg. compns. with vibration damping and low heat-buildup ability)

IT Vulcanization accelerators and agents
 thiuram sulfides and/or zinc dithiocarbamates and/or (polymeric) dialkyltin oxides for rubber compns. with vibration-damping and low heat-buildup ability)

IT 97-74-5, Tetramethylthiuram monosulfide 97-77-8, Tetraethylthiuram disulfide 136-23-2, Zinc dibutyldithiocarbamate 137-26-8 318-08-6 1634-02-2, Tetraethylthiuram disulfide 10591-85-2, **Tetrabenzyl thiuram disulfide** 13878-54-1 27517-48-2 37437-21-1, Tetrakis(2-ethylhexyl)thiuram disulfide 41365-24-6 62652-50-0, Tetrahexylthiuram disulfide 70605-35-5 175079-40-0
 RL: CAT (Catalyst use); USES (Uses)
 (rubber compns. with vibration-damping and low heat-buildup ability)

IT 9003-55-8
 RL: PRP Properties
 rubber, thiuram sulfide- and/or zinc dithiocarbamate- and/or polymeric dialkyltin oxide-contg. compns. with vibration-damping and low heat-buildup ability)

LI ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS
 AN 1991:141197 CAPLUS
 DN 114:145197
 TI A new safe thiuram, **tetrabenzyl thiuram disulfide**
 AU Seeberger, D. B.
 CS Akzo Chem., USA
 SO Rubber World (1990), 201(5), 18-21
 CODEN: RUBWA2; ISSN: 0035-9572
 IT Journal
 LA English
 CC 9-10 (Synthetic Elastomers and Natural Rubber)
 AB Tetrabenzylthiuram disulfide (I) contains only small quantities of its related nitrosamine, which is relatively nonvolatile and noncarcinogenic, and it does not readily form addnl. nitrosamine under normal vulcanization conditions nor during storage of its vulcanizates in absence of nitrosating agents. Although the mol. wt. of I is relatively high, its use in a rubber formulation in a 1:1 ratio by wt. in comparison to existing thiurams worked well when a small addnl. amt. of free S was added in vulcanization systems.
 IT benzylthiuram disulfide vulcanization system safety
 IT safety
 (in vulcanization systems using tetrabenzylthiuram disulfide)
 IT Vulcanization accelerators and agents
 (tetrabenzylthiuram disulfide, safety and properties of)
 IT 10591-85-2, Tetrabenzylthiuram disulfide
 RL: USES (Uses)
 (vulcanization agents, safety and properties of)

File guide
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SINCE FILE	TOTAL
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=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.00	25.94
DISCOUNT AMOUNTS FOR QUALIFYING ACCOUNTS:	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.34

FILE 'REGISTRY' ENTERED AT 13:11:10 ON 10 OCT 2002
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STRUCTURE FILE UPDATES: 9 OCT 2002 HIGHEST RN: 460312-12-3
DICTIONARY FILE UPDATES: 9 OCT 2002 HIGHEST RN: 460312-12-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting Smart/ELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNnote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnnotes27.pdf>

=> STR 11591-85-2

:END

L1 STRUCTURE CREATED

=> S L2 EXA SAN

SAMPLE SEARCH INITIATED 13:12:14 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

101.00 PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.01.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L: SEA EXA SAM L2

NO ANSWERS WERE FOUND

=> FILE STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.90	27.84
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.14

FILE 'STNGUIDE' ENTERED AT 13:13:55 ON 10 OCT 2002
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FILE CONTAINS CURRENT INFORMATION.
LAST RELEASED: OCT 4, 2002 23:11:47 UTC

=> FILE REG

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.44	29.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.14

FILE 'REGISTRY' ENTERED AT 13:23:31 ON 10 OCT 2002
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STRUCTURE FILE UPDATED: * OCT 10 2002 HIGHEST RN 463612-12-3
DICTIONARY FILE UPDATED: * OCT 10 2002 HIGHEST RN 463612-12-3

TSOA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> STR 1-591-85-2

:END

L4 STRUCTURE CREATED

=> S L4 EXA FUL

FULL SEARCH INITIATED 13:28:35 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED 2 TO ITERATE

PROCESSSED 0 ITERATIONS
SEARCH TIME: 00.00.01

2 ANSWERS

L5 2 SEA EXA FUL L4

END

1. NAME:

L5 2 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN Thioperoxydicarbonic diamide ([(H2N)C(S)]2S2), tetrakis(phenylmethyl)-
19CI.

MF C30 H28 N2 S4

CH2 Ph

Ph CH2 N C S S C N CH2 Ph

S S CH2 Ph

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):none

ALL ANSWERS HAVE BEEN SCANNED

sealants and products therefrom
 IN Grimm, Stefan; Pressel, Karl-Heinz; Proebster, Manfred
 IA Teroson GmbH, Germany; Grimm, Stefan; Pressel, Karl-Heinz; Proebster, Manfred
 SO ECT Int. Appl., 22 pp.
 CODEN: EIXXPC
 LA German
 IC ICM C08J011-28
 ICI 088L001-04
 JC B3-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 39, 42
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9710253	A1	19970103	WO 1996-EP2488	19960607
	W: AU, BY, CA, CN, CZ, HU, JP, KR, NO, PL, RU, TR, UA, US				
	PW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19521671	C1	19970918	DE 1996-19521671	19960614
	CA 2214390	AA	19970103	CA 1996-2224390	19960617
	AU 9602257	A1	19971119	AU 1996-62257	19960617
	EP 8921154	A1	19980401	EP 1996-920109	19960607
	EP 8921154	B1	20111031		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
	JP 1151432	TE	19990931	JP 1996-502434	19960607
	AT 207948	E	20011119	AT 1996-921109	19960607
	CA 207948	A	19971119	CA 1996-504	19960613
	DE 19521671	A	19971119	DE 1996-19521671	19960614
	US 6117601	A	20000912	US 1996-933411	19960607
PRAI	DE 1996-19521671	A	19960614		
	WO 1996-EP2488	W	19960607		

AB Processing is carried out in a nonvolatile liq., with the adm. of a depolymer. agent, preferably a S-based vulcanization accelerator known from rubber technol. The depolymerizate can be added in high proportions to the hardener component of two-component polysulfide and/or polymercaptan adhesives, sealants or coating materials without substantially modifying its hardening characteristics or properties concerning stability during storage. The depolymer. agents may be in the form of thiazoles, thiurams, dithiocarbamates, dithiocarbamylsulfenamides, xanthates, S-contg. triazines, thioureas, etc. Examples were provided based on hardened Terostat 99IR compns.

ST polysulfide recycling depolymer. adhesive sealant; rubber polysulfide depolymer. recycling; polymercaptan depolymer. recycling

IT Sealing compositions

2-component; recycling of hardened polysulfides and/or polymercaptans by depolymer. int.

IT Depolymerization

agents; in recycling of hardened polysulfides and/or polymercaptans

IT Recycling of plastics and rubbers

by depolymer. of hardened polysulfides and/or polymercaptans;

IT Crosslinking agents

Crosslinking catalysts

Plasticizers

Vulcanization accelerators and agents

(in recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT Thiols (organic); uses

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(polythiols, polymers; recycling of hardened polysulfides and/or polymercaptans by depolymer.)

IT Polysulfide rubber

CS Flexsys BV, Neth.
 SO RubberChem '99, a Two-Day Conference, Antwerp, Belgium, Nov. 22-23, 1999
 (1999), paper21/1-paper21/4 Publisher: Rapra Technology Ltd., Shrewsbury,
 UK.
 CODEN: 69BLQN
 DT Conference
 LA English
 CC 39-10 (Synthetic Elastomers and Natural Rubber)
 AB The effect of addn. of a N-nitrosamine safe thiuram, such as
tetrabenzyl thiuram disulfide (TBzTD), as an
 accelerator in natural rubber formulations was explored. The effect of
 lower amt. of TBzTD was studied in sulfenamide cure to obtain better
 balance of performance characteristics. The lower amt. of TBzTD generated
 a network that contained an even distribution of mono- and polysulfides.
 A crosslink study was done to correlate the properties to the structure of
 the network.
 IT property natural rubber **tetrabenzyl thiuram**
disulfide accelerator
 IT Natural rubber, properties
 RL: PCF (Polymer in formulation); PRP (Properties); USES (Uses)
 (SMR CV; effect of **tetrabenzyl thiuram**
disulfide accelerator on properties of natural rubber
 formulations)
 IT Vulcanization accelerators and agents
 (effect of sulfenamide, **tetrabenzyl thiuram**
disulfide accelerator system on properties of natural rubber
 formulations)
 IT Crosslink density
 (in natural rubber formulations contg. sulfenamide/**tetrabenzyl**
thiuram disulfide accelerator system)
 IT Abrasion
 Compression
 Elongation, mechanical
 Fatigue, mechanical
 Hardness (mechanical)
 Loss modulus
 Mechanical loss
 Storage modulus
 Tensile strength
 Torque
 Young's modulus
 of natural rubber formulations contg. sulfenamide/**tetrabenzyl**
thiuram disulfide accelerator system)
 IT 10591-85-2, **Tetrabenzyl thiuram disulfide**
 RL: CAT (Catalyst use); USES (Uses)
 (effect of **tetrabenzyl thiuram disulfide**
 accelerator on properties of natural rubber formulations)
 IT 137-26-3, Tetramethyl thiuram disulfide
 RL: CAT (Catalyst use); USES (Uses)
 (effect of **tetrabenzyl thiuram disulfide**
 accelerator on properties of natural rubber formulations and comparison
 with)
 IT 95-33-0, N-Cyclohexyl-2-benzothiazolesulfenamide
 RL: CAT (Catalyst use); USES (Uses)
 (effect of **tetrabenzyl thiuram disulfide**
 and N-Cyclohexyl-2-benzothiazolesulfenamide accelerator system on
 properties of natural rubber formulations)
 DI ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS
 AN 1997:140176 CAPLUS
 BN 126:145173
 TI Recycling of hardened polysulfide and/or polymercaptan adhesives and